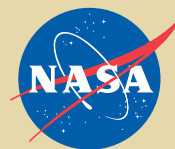


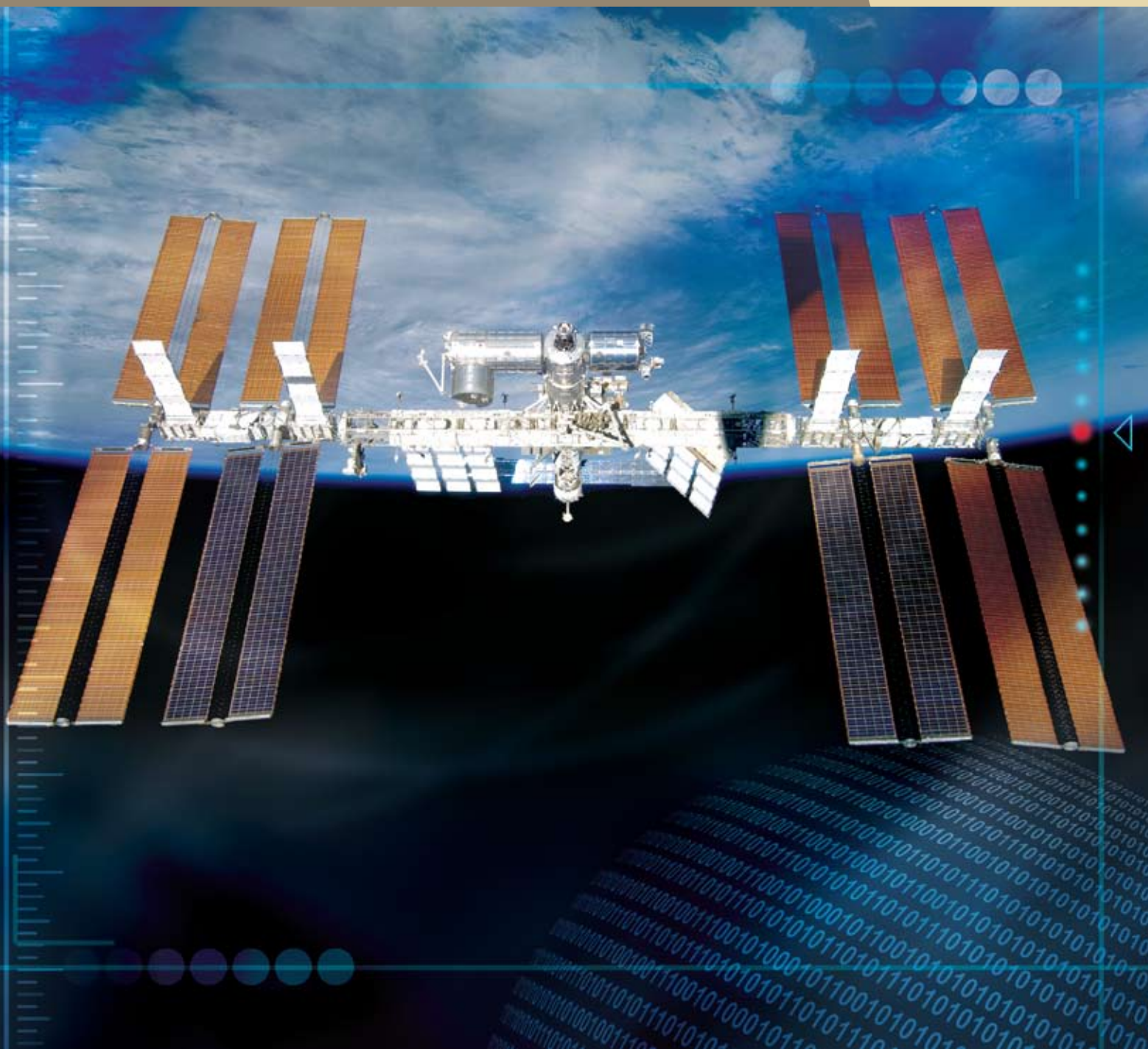
National Aeronautics and Space Administration



Roundup

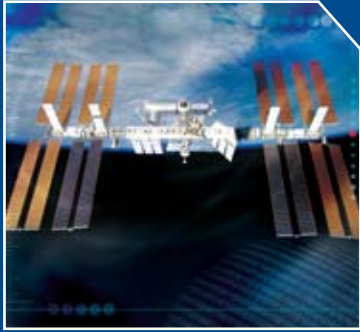
Lyndon B. Johnson Space Center

April 2009



The International Space Station gets amped up.

Guest Column



On the cover:

The International Space Station.



NASA/PHOTO iss018e033775

Photo of the month:

(From top) View of Flight Engineer Yury Lonchakov, Commander Mike Fincke and Flight Engineer Sandra Magnus in Node 2 Harmony for an Expedition 18 crew photo.

History is what we are making with each orbit and every day that the International Space Station and its crew members continue our mission of operating, assembling and utilizing the station above our planet Earth.

This past November, we marked a historical milestone of 10 years of continuous on-orbit operations. We begin our second decade of operations by celebrating that fact and acknowledging the success of the station as one of the greatest technological and engineering accomplishments in human history.

As 2010 rapidly approaches, we are nearing completion of the assembly of the station. This year in May will mark another exciting and significant milestone as we expand the nominal crew size from three to six people. In fact, given the current Soyuz and shuttle launch dates, for almost a month after the Increment 20 crew arrives in May, all five agencies that participate in station will be represented on orbit at one time. Indeed, this is a very rare occasion for station, as it is not envisioned to ever occur again.

The crew size increase will expand our vehicle capability and our International Partner flight opportunities, which in turn will greatly increase the amount of the world-class research, science and utilization that is currently performed on the space station. This research and science expands the knowledge base and operational experience that is so critical for enabling us to safely and successfully return to the moon and beyond as we continue humankind's quest of exploration and discovery.

The International Space Station Program Vision states that we are a human outpost in space, bringing nations together for the benefit of life on Earth and beyond, and that we will make revolutionary discoveries and establish the permanent international presence of humans in space to advance the exploration of our solar system and to enable commerce in space.

Our mission statement declares that we will safely build, operate and utilize a permanent human outpost in space through an international partnership of government, industry and academia to advance the exploration of the solar system, perform scientific research and enable commerce in space.

Without the exceptional professionalism and dedicated support of the thousands of men and women here at Johnson Space Center, we would not be able to meet our vision or accomplish our mission.

On those rare nights when the Texas weather is cooperating, along with the Earth and the station's orbital mechanics, I go out to watch the International Space Station. I am very proud of the accomplishments, not only of this country and this agency, but of all the countries that participate in the space station endeavor. I am also extremely grateful and humbled to be a part of this program and the NASA and JSC team that is making it a reality, and more importantly that is leaving a legacy that we will all be proud to give to our children and their future.



NASA/PHOTO jsc2005e39886

Michael Suffredini
Program Manager,
International Space
Station

Experiencing their dream

By Jenny Knotts

“Three women, three nationalities, uniting together for their love of science and to prove to the world women are capable.”

That was the answer Ciara Baisden of Lakeland High School in Florida gave to the question of why NASA should pick her team as the winner of the Your NASA Dream Experience Contest.

The contest gave teams, consisting of one teacher and two students, a chance to compete for a three-day job shadow at Johnson Space Center. For applications to be complete, each team member had to respond to several short-answer questions, and the students had to write an essay on what would be their dream job.

The applications were narrowed down to the top six, who were then interviewed by phone. The team from Lakeland, which included teacher Angela Munoz, senior Nicole Dickerson and sophomore Ciara Baisden, was the winner.

Notified in a surprise announcement at a school assembly, astronaut Dottie Metcalf-Lindenburger called the team on stage to tell them they had won.

“I have never been so overjoyed and felt like I was living a dream,” Munoz said.

The job shadow started on Feb. 25 with tours of the Space Vehicle Mockup Facility (SVMF) and the Mission Control Centers. Astronaut Karen Nyberg met the team at the SVMF to show them around and talk about her experiences in space.

“Karen was super nice,” Munoz said. “She really inspired us with her enthusiasm for space exploration and determination.”

At lunch they had a surprise guest: Astronaut Stephanie Wilson.

“Just the day before, I told Ms. Munoz how I wanted the poster she had of Stephanie to hang on my wall to inspire me to reach for my dreams,” Dickerson said, “and there she was in the flesh, eating lunch with us!”

The rest of the day was spent in Robotics shadowing Linda Bigonesse, learning about how she trains astronauts on the robotic arms. They also experienced the motion-based simulator and took turns trying to land the shuttle.

The second day started with observation of an International Space Station robotics simulation. The winning team had the opportunity to see it from both the test conductor’s side and the mission control side. They got to meet training leads Josh Matthew and Michelle Ham, as well as Flight Director Ginger Kerrick.

“(Kerrick) taught us that a little confidence and persistence can go a long way,” Dickerson said.

Then it was on to the food lab, where they got to have the astronaut experience of tasting the food and scoring their favorites. The group tried things like hot cocoa, chicken noodle soup and spicy green beans. The consensus was the food “wasn’t too bad.”

Lunch on day two concentrated on careers. In their dream job essays,



NASA/BOLDT JSC2009E052142

Your NASA Dream Experience Contest winners (from left to right): teacher Angela Munoz, sophomore Ciara Baisden and senior Nichole Dickerson.

Dickerson and Baisden said they wanted to be an astrobiologist and a flight surgeon, respectively, so this gave them a chance to talk to women in those fields. A flight controller and an education specialist were also on hand to share ideas of other careers available at NASA.

“It was amazing to talk to Shannan (Moynihan), the flight surgeon,” Ciara Baisden said. “She told me how long it took her, what the goods/bads are and what they really do.”

Finishing the day, the team toured the Neutral Buoyancy Laboratory. After the tour, they were able to watch astronauts Metcalf-Lindenburger and Garrett Reisman finish up on some training.

To begin their last day, the team visited Kimberly Hambuchen in Engineering and saw Robonaut and the Lunar Electric Rover. They were amazed to find out that the rover had been in the presidential inaugural parade. After that, they stopped by International Space Station Mission Control, followed by lunch with Metcalf-Lindenburger and fellow Astronaut Pam Melroy.

The last stop before heading home was at Ellington Field to see the T-38s, the C-9 “Weightless Wonder” and the Shuttle Training Aircraft.

“Before the trip, the girls definitely had a strong interest in science, but after this it evolved into a passion,” Munoz said.

Star of Constellation

A date with destiny

By Victor Scott

NASA's Constellation Program isn't just about building the next generation spacecraft, but launching explorers who will help us learn more about our world. Discover the faces behind the hardware that will send humans to the moon and beyond with each Star of Constellation profile.

On a warm August day in 1969, 4-year-old Rick Scheuring waited impatiently for a glimpse of the first men to walk on the moon. Standing next to his parents at the Apollo 11 homecoming parade in downtown Chicago, Scheuring cheered as the astronauts' motorcade inched its way down Michigan Avenue. Almost four decades would pass before he would be close to those American heroes again.

"My father really loved the space program and set me on a course to want to learn and work in space exploration," Scheuring said while sitting in his office at Johnson Space Center 39 years later. "But I always wanted to be a doctor too. I figured someday I might combine the two."

And after a long journey, that's exactly what he did.

Scheuring, now a NASA flight surgeon, serves as an integration lead for medical operations in NASA's Constellation Program that will return humans to the moon and eventually take them to Mars.

But the path Scheuring followed to NASA wasn't always navigated with a focus on space exploration or medicine. Early on, he set his sights on the ultimate athletic career.

"In high school, I ate, breathed and slept track and field," Scheuring explained. "I really wanted to compete in the Olympics someday."

His desire to be an Olympic champion and training helped Scheuring land an athletic scholarship at Eastern Illinois University, where he competed in the decathlon. But after years of intense competition and a series of devastating injuries, reality set in—his dream to compete in the Olympics was over.

"When my coach asked what I'd do next, I immediately told him 'become a doctor,'" Scheuring said.

Scheuring took his Olympic-sized passion and focused on becoming a physician. "They're easily transferable," Scheuring said. "It comes down to tenacity and perseverance. If you have those, you can go anywhere."

After college, Scheuring worked as an Emergency Room (ER) aid in Chicago. He wanted to make sure he could handle the intense responsibilities of the medical profession, and he knew the ER would be the ultimate testing ground.

"I loved it," Scheuring said. "It was everything I thought medicine would be. And the coolest part was just seeing how my efforts helped people."

The desire to help others drove Scheuring through medical school at the Chicago College of Osteopathic Medicine. Then, while completing training in Denver, he met and married his girlfriend Michelle and started a family. Eventually the Scheurings moved back to Illinois, where his family and sports medicine practice flourished for years.

Scheuring's career seemed set, and probably would have been, had he not heard about aerospace medicine, an emerging medical discipline. Realizing he could possibly combine his childhood love

for space exploration with his medical career, Scheuring entered the aerospace medicine residency at Wright State University.

There, after the Sept. 11 attacks, he made what he calls "one of the only unilateral decisions of my life." The attacks convinced him to sign up to be a U.S. Army Reserve flight surgeon. Later, he discovered the required training was the final puzzle piece needed to reach his dream job, serving as a NASA flight surgeon in the Constellation Program.

While working at NASA almost four decades after that warm August day in 1969, fate helped Scheuring meet his three childhood space heroes, the Apollo 11 crew members. Neil Armstrong, Buzz Aldrin and Michael Collins shared details of their amazing journey to help Scheuring gather astronaut input to design critical medical crew support systems for future Constellation missions.

"The Apollo crew members said to make sure the mission planners 'put crew member needs first,'" Scheuring said. "And that's just what our generation of flight surgeons works hard to do."

As a proud member of NASA's Constellation Program, Scheuring said he is a huge supporter of NASA and he strongly believes in the values of space exploration.

"Wherever I go, I talk to people about NASA," he said. "If they think space exploration is too expensive, I tell them the number one reason to support space exploration is that it makes life on Earth better. Period."

For photos and video of Scheuring, along with more information on NASA's Constellation Program, visit:

<http://www.nasa.gov/constellation/stars>



NASA/STAFFORD JSC2008E137643

Reflecting on a Johnson Space Center relic

By Neesha Hosein

One historic landmark in the Johnson Space Center family will celebrate an anniversary this year. “Opening the Next Frontier—The Next Giant Step,” a 16-by-72-foot mural painted by world-renowned artist Robert McCall, turns 30 in July. The mural still greets the lobby of visitors from its original location in Building 2 South, outside the Teague Auditorium.

McCall documented the space program through his paintings, reflective of the past, present and future. The mural depicts the first 20 years of American space exploration, from Mercury and the first manned spaceflight of Alan Shepherd in 1961, to the Gemini, Apollo and Space Shuttle Programs. The mural is just one painting from McCall’s dynamic collection.

Annually, millions of people view McCall’s other colossal space

McCall painted figures of some key JSC individuals in the mural. Some of those are: Chris Kraft, Bob Gilruth, Gene Kranz, George Abbey, Michelle Brekke, Ed Fendell, Glenn Lunney, John Young, Judy Resnik, Gus Grissom, Alan Shepherd, Guy Bluford and Chuck Biggs. Other faces from the Public Affairs Office are in the group, located at the far left side of the mural.

“One neat thing that he did was use recognizable people at their official NASA positions in the painting,” Biggs said. “The flight controllers were actual recognizable flight directors on prior missions. With one exception, McCall included a female flight director and people of color in other positions of technical importance in the mural.”

Mike Gentry, a researcher and librarian in the Media Resource



NASA/PHOTO S79-30844



NASA/PHOTO S79-31262

Artist Robert McCall puts the finishing touches on the giant mural in the lobby of the Building 2 South Auditorium.

mural that stands six stories high in the National Air and Space Museum in Washington, D.C. McCall also created U.S. postal stamps that commemorate the space program.

McCall completed the Teague mural for JSC in six months, from January through July in 1979. Many of the employees who witnessed the painting from start to finish are still around to share their memories.

“Chris Kraft (then center director) appointed me the project manager on the painting, and it was to tell the story from the beginning of the space program until we were into the (Space) Shuttle Program and Space Station,” said Chuck Biggs, retired chief of Public Services, Office of Public Affairs. “Because of (McCall’s) association with space in his artwork, the center wanted him to do the painting.”

“We erected scaffolding for him to work from and blocked off the front part of the auditorium so the visitors would not interfere with his work and he would not drop paint on them,” Biggs said.

McCall photographed sections of the master sketch and projected them on the wall, one section at a time, using the projections as a guide for drawing all the way along the 72-foot wall, Biggs explained.

Center, said the making of the mural was not as simple as it might seem, “because you have to throw in the factor of thousands of tourists a year coming through that building (and) continuous chatter. He was able to stay very focused.”

“He would come up every morning before he started to work and have coffee, and we would talk for 15 to 20 minutes,” said Bill Taylor, JSC projectionist. “He told such great stories about all the places he had been and what he had done on previous paintings. He was a very interesting fellow.”

Taylor reflects on the ceremony held to celebrate the completion and dedication of the painting to JSC, stating that “the auditorium filled up with people, and we put up a big screen on the stage (where) he had a slide presentation of all his work.”

“It’s not something that’s just a torn battleground and just a ghost of its former self,” Gentry said. “The painting is there and it will outlive Bill and (me) and McCall and everybody. It’s a legacy on canvas.”

Today, at the ripe age of 90, McCall is still a working artist.

To view more photos of the JSC mural’s history, visit: <http://www.jsc.nasa.gov/jsfeatures/>

HDTV enhances station communication

Farewell to analog

High Definition (HD)TV has dramatically increased the quality and speed of global communications with the International Space Station.

Dylan Mathis, Mass Communications lead in the International Space Station External Integration Office, explained that with the advent of HDTV, NASA can communicate with synchronous audio and video in a live or played-back mode to bring to life the story of the station with significantly increased audio quality. Prior to using this type of system, audio and video were totally separate and not included in the video. HD resolution is nearly five times that of traditional TV.

"Basically, HD and digital TV are here to stay, and analog TV is going away," said Carlos Fontanot, chair, station Imagery Working Group. "Analog TV is much more forgiving than digital TV. With rabbit ears, you would move the antenna and the signal might come in noisy and snowy. With digital TV, either it's there or it's not."

Partnership with JAXA

In partnership with the Japanese Aerospace Exploration Agency (JAXA), NASA has done two major HDTV downlink projects.

With the first project, NASA made TV history by producing the very first live HD broadcast from the station to Earth on Nov. 15, 2006.

For the second project in 2007, "we partnered with JAXA again to do a Station Detailed Test Objective (SDTO)," Mathis said. "We put semi-professional (prosumer)-sized HD camcorders and hardware on orbit, giving us

the capability to downlink from multiple locations within the United States On-orbit Segment."

To explain the partnership, Fontanot said the Japanese, in the advent of launching their module quite a few years ago, developed their own HD system, the Multi-Protocol Converter (MPC). They developed it in parallel to the system we had, the Space Video Gateway, and the Japanese system turned out to be very "swift, agile, (and) required less bandwidth to downlink. They



A view of the Earth from station.

NASA/PHOTO

were very interested in testing it onboard."

Fontanot said the Imagery Working Group facilitated the launch, deployment and testing of JAXA's MPC SDTO, which are experimental systems. It was very successful, to the point of "becoming the preferred system. We are now having to backfill, develop and make the infrastructure more robust on the ground to declare it operational, but it is a Japanese system."

A world of possibilities in communications

"Imagery is a very important part of communicating what goes on aboard the International

Space Station, whether it's for operations, training (or) payloads," Mathis said.

To date, more than 200 hours of HD video have been downlinked from the station. The video has included a variety of activities and special messages from the crew.

"Because of this technology, we get to see live in-flight events that are managed by (the Office of Communications and) Public Affairs here at Johnson Space Center," Fontanot said.

News media are able to

"We've got a spacecraft going 17,500 mph that has to send a signal to a satellite in space, then to the ground in White Sands, NM, then via fiber-optic cable to JSC, and finally to the public. All of this is done in milliseconds," Mathis said.

What the future holds

Mathis said that "we've taken this technology and we've worked with the (Space) Shuttle Program to provide them with the capability, as well. They should be getting downlink on the STS-119 flight and for the remaining shuttle flights. We will use this system to downlink HDTV."

"This provides the possibility of seeing station fly-arounds in real time, or near real time, in HD so that we can show the world what we're doing and make them a part of it," Mathis said.

As for upcoming ventures, Mathis said the next phase after the shuttle mission is that "we are also looking up multiple possibilities for live external HD cameras to show Earth views. Then we will explore the latest video compression technologies that allow us to downlink higher quality with less data. This has a direct application to the Constellation Program."

The IMAX will fly on the STS-125 repair mission to the Hubble Space Telescope, currently scheduled for May. Using external cameras in the shuttle cargo bay, the crew will capture video of the Hubble being repaired. Then IMAX will incorporate in-cabin scenes to the final product. This is just one example of the many exciting things to come with HD technology and the space exploration program.

conduct interviews with the crew. It is also used for special events. For instance, the crew onboard can downlink special messages for holidays.

The technology is also used for in-flight educational events in which astronauts can interface with students to demonstrate experiments, or during the repair of a broken treadmill, or to capture hours of Earth views and visiting vehicles to the station docking and undocking, either live or recorded.

Speedy delivery

Mathis said it is tremendously complex to send any data, such as video, from the station to the ground.

By Neesha Hosein



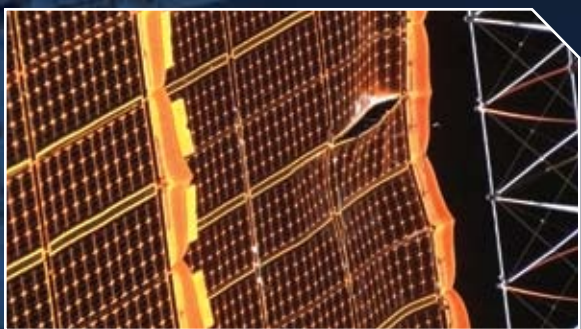
Russian Progress vehicle shortly before docking.



The International Space Station is behind Space Shuttle Endeavour during STS-126, shortly after undocking.



Space Shuttle Endeavour during STS-126, as seen from the station.



A torn space station solar array that was eventually fixed during a spacewalk.

These photos are HDTV screen shots, utilizing the most current technology available today.

Space Invasion: **Texas style**

By Victor Scott

Space Week Texas 2009 was a space exploration celebration as big as the Lone Star State, featuring out-of-this-world space exhibits, educational presentations for students, astronaut appearances, legislative resolutions and the chance to touch a 3-billion-year-old moon rock. NASA turned 50 last year, and the International Space Station turned 10. This summer, America celebrates the 40th anniversary of the Apollo 11 lunar landing. Space Week celebrated all these space exploration milestones and also gave participants the chance to see what NASA's next giant leap will be. The initiative was organized in collaboration with the Bay Area Houston Economic Partnership and aerospace industry partners.

The shining star event was Space Day at the Capitol, and it blasted off on March 5. Space Week Texas 2009 ran March 4 to 8 in Austin, Texas, and March 9 to 12 in College Station, Texas. Venues for the celebration included the University of Texas campus, the Texas Capitol, the Lyndon Baines Johnson Presidential Library and Museum in Austin and the George Bush Presidential Library and Museum in College Station. Space Week offered thousands of students, teachers and members of the public the chance to join NASA's exciting and inspirational space exploration journey.

Astronauts are cool! NASA mascot Cosmo provides shade from the hot sun on the Capitol lawn for a young space fan.



NASA/HARNETT JSC2009E053388

For more Space Day at the Capitol photos, visit: <http://www.jsc.nasa.gov/jscfeatures/>



NASA/PHOTO JSC2009E053424

Space invasion: Hundreds of Austin-area students invade the Texas Capitol for Space Day.



NASA/PHOTO JSC2009E053333

Hear ye! Hear ye! NASA is recognized by the Texas Legislature for its economic, educational and inspirational contributions to the Lone Star State.



NASA/PHOTO JSC2009E053383

Robots, robots, robots! Students are entertained and educated by the mechanical mysteries of robots.

Breakthroughs in laser peening bring Johnson Space Center to the forefront

By Brandi Dean

Most of the time, Omar Hatamleh is the subsystem manager for the shuttle wings and tail. But on the side, he's helping Johnson Space Center become a worldwide authority on laser peening.

Laser peening is a process that uses high-energy pulses from a laser to increase the resistance of metals and alloys to fatigue and improve their strength. It's not a new idea—the process was invented in the 1960s—but only in the last two decades have the power of lasers required become feasible. Even now, there are only two commercial laser-peening facilities in the United States. But the concept, which also helps prevent cracks from forming and stop those that have formed from getting worse, is starting to catch on. Hatamleh thought that JSC should get in on the action.

In particular, he thought that laser peening could be used to



Omar Hatamleh discusses laser peening at a conference at JSC.

strengthen welds on future space vehicles. Stronger welds mean you can use less material to begin with, saving weight in the vehicle and freeing up weight for cargo.

The Constellation Program is already looking at using friction stir welding, a process that uses the friction from a cylindrical-shouldered tool to heat the metal, causing it to soften without reaching the melting point. The conventional fusion welding process welds the material by melting it, which weakens it. Friction stir welding is already being used in several NASA applications, including the external tank. Although it is a welding process with many advantages, there's always room for improvement.

That's what gave Hatamleh the idea. A few years ago, he was working a beam that had been friction stir welded but developed cracks due to tensile stresses, or stresses that pull two sides of something apart.

"I kept thinking about, 'Okay, the friction stir weld doesn't have as much stress as a fusion weld, but it still has some stresses,'" Hatamleh said. "So what about if we tried to further reduce those stresses? That's how I started thinking about bringing the two together."

After some testing, he found that laser peening a friction stir weld not only strengthened it by 50 percent, it also significantly increased the time it took to develop cracks and the time it took for cracks to get larger. This is good news for friction stir welding, since the heating cycle the material

experiences during welding and the clamps used can put residual stresses on the weld.

And those are only the preliminary results. Hatamleh believes that with some optimization, laser peening might be able to further strengthen welds beyond the levels achieved so far.

"Once you start tinkering with these kinds of things and see how much

improvement you can get, it becomes addicting," Hatamleh said.

He also started looking for more sources of information on laser peening and found that it wasn't easy to come by. There had never been a laser peening conference before—laser peening had only been tagged onto conferences on other subjects. Since interest in the subject has been growing recently, Hatamleh thought it was time, and so did others.

In December, Hatamleh organized the first International Conference on Laser Peening in Houston, bringing most of the prominent scientists from nine countries to JSC to talk about industrial applications for laser peening.

"It went very well," Hatamleh said. "Everybody asked us to put together another conference for next October."

But laser-peening enthusiasts weren't the only ones to benefit from the conference.

"Once you start tinkering with these kinds of things and see how much improvement you can get, it becomes addicting."

"Not only did we gather and talk about laser peening," Hatamleh said, "but holding the conference will also help situate NASA at the forefront of this technology and establish JSC as the center of gravity for propelling this novel industrial application forward."

Hatamleh now gets e-mails and phone calls, on a regular basis, from people asking for his opinion. That's not exactly unusual for a NASA engineer, but as JSC isn't primarily a research center, Hatamleh wasn't expecting it. He does, however, appreciate it.

"When people are looking at laser peening and the NASA name keeps popping up in this area," Hatamleh said, "that's good for NASA."



Friction stir welding is being used in many NASA applications.

Spotlight Tim Reynolds

Supervisor, Operations Control Center in the Space Vehicle Mockup Facility

Time at Johnson Space Center: 13 years



NASA/PHOTO

Q: What is the coolest part of your job?

A: To get to work with all the great people at JSC, from the trainers, support staff and, of course, the flight crews on a job that so few people in the world will ever have a chance to experience.

Q: What are your favorite hobbies or interesting things you do away from the office?

A: Skiing, snow-shoeing, backpacking and scuba diving.

Q: What would you be doing if you weren't in your current job at JSC?

A: I really don't know what I would be doing, but I would hope to be doing it in Colorado or New Mexico. NASA was my dream job since I was 9 years old.

Q: What would people be surprised to know about you?

A: That I have been playing guitar for over 30 years.

Q: Favorite quote or motto?

A: "And we stand and watch the gods and idols fall as the blameless ones go blindfold to the wall." – R. Trower

Q: Favorite sport?

A: America's Cup yacht racing.

Q: Last good book you read?

A: "Adrift: Seventy-Six Days Lost At Sea" by Steven Callahan.

Q: Best music in your collection?

A: "Feeding Frenzy" by Jimmy Buffett.

Q: Who are your heroes?

A: My father. Second would be growing up with the space program and seeing the astronauts perform incredible feats in space month after month. I always thought the Gemini Program was awesome because we learned the basics of (spacewalk) and rendezvous.

Q: What does JSC mean to you?

A: What NASA and JSC mean to me is that it is such a privilege to get to work on the (human spaceflight) program in the first place. (My) best memories are made all the time watching astronaut candidates come in and getting to know them, then watching as they move closer and closer to flying a few years later (and) then talking with them after their flight. It's great to have been able to see so many go through the process and achieve their dreams, and it's a pleasure to work with them every day.



NASA/PHOTO

WANTED!

Do you know a JSC colleague or team that does something extraordinary on or off the job? Whether it's a unique skill, interesting work, special professional accomplishment, remarkable second career, hobby or volunteerism, your nominee(s) may deserve the spotlight!

The Roundup shines the light on one special person or team each month, chosen from a cross section of the JSC workforce. To suggest "Spotlight" candidates, send your nomination to the JSC Roundup Office mailbox at jsc-roundup@mail.nasa.gov. Please include contact information and a brief description of why your nominee(s) should be considered.

Center Scoop

EARTH DAY, APRIL 22, REMINDS US TO BE SMART WITH OUR RESOURCES

Johnson Space Center employees are doing a fantastic job of recycling mixed office paper. But have you thought about how to make a difference before recycling? The three Rs stand for Reduce - Reuse - Recycle. Ideally, we should reduce the amount of material needed to do a particular job. Set up printers and copiers to automatically print double-sided. You can still print a particular job single-sided if need be, but we can substantially reduce the amount of paper used at JSC by printing double-sided. Also, think twice before printing that e-mail or document. Can it be reviewed or edited electronically without printing it? Last year, JSC spent \$1.4 million to purchase office paper. Reducing paper use saves money as well as natural resources like trees, water and oil.

DID YOU KNOW THE STARPORT CAFÉS COMPOST?

Since December, both Starport Cafés in Buildings 3 and 11 have participated in a compost project. Food service employees sort food preparation scraps and coffee grounds for compost on site. Food scraps include vegetables, fruits and grain products that would otherwise be thrown away during the meal preparation process for breakfast and lunch. JSC has three compost barrels—situated by Building 42—that produce nutrient-rich compost for use around site.

This project is proving to be quite successful and is growing. Watch for more sustainable practices around site as JSC moves to the “greener side.”



NASA/PHOTO ISS015E22276

Earth Day reminds JSC team members to be smart with resources to help care for the planet.



NASA NIGHT WITH THE HOUSTON ROCKETS

The Feb. 24 Houston Rockets game featured pre-game recognition of astronauts Patrick G. Forrester and Charles O. Hobaugh, the frequent inclusion of JSC's mascot, Cosmo, court-side during the game and an astronaut autograph session for fans. The event reached an audience of 17,515 in the Toyota Center, with a record number of over 700 JSC team members attending the special NASA Night.

Astronauts Charles O. Hobaugh (left) and Patrick G. Forrester participated in NASA Night at the Houston Rockets.

Roundup

The Roundup is an official publication of the National Aeronautics and Space Administration, Johnson Space Center, Houston, Texas, and is published by the Public Affairs Office for all Space Center employees. The Roundup office is located at 2200 Space Park Drive, Rm. 220. The mail code is AP22. Visit our Web site at: <http://www.jsc.nasa.gov/roundup/online/> For distribution questions or to suggest a story idea, send an e-mail to jsc-roundup@mail.nasa.gov.

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Texas Independence Trail Ride

makes a special stop at the center



A touching reminder of wild-west history clip-clopped through the present as the Texas Independence Trail Ride made a special stop at Johnson Space Center on Feb. 24.

JSC team members came out along the parade route near Rocket Park and 2nd Street as the trail ride wound its way to the Gilruth Center. A few riders, as well as Remi the rodeo clown, swung by the JSC Child Care Center to entertain and educate the kids. The trail riders then got a taste of JSC hospitality as they camped out at the Gilruth Center overnight